

## § 4. Universities.

1. **Sydney University.**—The movement for the establishment of the University of Sydney may be said to have originated as far back as 1825 with the institution of the old Sydney Grammar School, whose first head master, the Rev. Dr. Halloran, is credited with being "the founder of anything like the means of obtaining a classical education in Sydney." The original school was not, however, very successful, and it was succeeded in 1830 by a trustee institution known as the Sydney Public Free Grammar School. By way of endowment a sum of £10,000 was raised in £50 shares, each of which entitled the holder or his executors to the right in perpetuity of having one boy a student at the college. The building was opened for the reception of students in 1835, and was located on the site of the present Sydney Grammar School. In 1849 the proprietors of the institution presented a petition to the Legislative Council, having for its object the conversion of the College into a University. Upon the presentation of this petition the following motion was brought forward by Mr. W. C. Wentworth—"That a select committee be appointed to inquire into the matters contained in the petition of the proprietors of the Sydney College, and report upon the best means of instituting a University for the promotion of literature and science, to be endowed at the public expense." The motion was agreed to, with the omission of the words in italics, in order that the committee might have an absolutely free hand in dealing with the matter. The motion was presented on the 6th September, and the committee brought down its report on the 21st of the same month. It recommended the establishment of a University without delay, and suggested an endowment of £5000 a year with £30,000 for a building fund. An important provision in the report was that which specified that the University must belong to no religious denomination and require no religious test. With regard to the first Senate, it was proposed that there should be three *ex officio* members—the Chief Justice, the Colonial Secretary, and the Attorney-General—and nine others to be nominated by the Legislative Council, that there should be a Provost and Vice-Provost, and that the other members should be termed Fellows, that until there should be a hundred graduates, any vacancy in the body should be filled by the surviving or continuing members, but afterwards by election by the graduates.

In its original form the Bill met with considerable opposition, particularly in regard to the proposed absence of religious formularies. It was reintroduced to the Legislative Council in August, 1850, and the second reading was carried on the 11th September. The nomination of the first Senate was left to the Executive Council, and the number of Senators was raised to sixteen. The Act of Incorporation received the assent of the Governor on the 1st October, 1850, and the first Senate was appointed on the 24th December of that year. Mr. Edward Hamilton, M.A., was elected Provost, and Sir Charles Nicholson, M.D., Vice-Provost. Professorships were soon instituted in classics, mathematics, and chemistry and experimental philosophy, and the gentlemen selected to fill these posts arrived in Sydney in 1852. The first matriculation examination was held in October of this year, and twenty-four candidates succeeded in passing the test. The formal inauguration ceremony was held on the 11th October in the large hall of the Sydney College building. Originally it was intended to purchase this college from the trustees, but later on it was deemed essential to secure a larger area of ground, and to erect more commodious premises, and the Government in 1855 granted 128 acres at Grose Farm, where the existing University and Colleges are situated. A sum of £50,000 was also granted for the erection of buildings, on consideration that not more than £10,000 should be spent in any one year. Chiefly through the exertions of Sir Charles Nicholson a Royal Charter was granted to the University on the 27th February, 1858. This document, amongst other things, declared that "the degrees of Bachelor of Arts, etc., already granted or conferred, or hereafter to be granted or conferred by the Senate of the said University of Sydney, shall be recognised as academic distinctions and rewards of merit,

and be entitled to rank, precedence, and consideration in the United Kingdom and in our colonies and possessions throughout the world as fully as if the said Degrees had been granted by the University of the said United Kingdom."

The present main University building was commenced in 1854 and finished in 1860, at a cost of £80,000. The Great Hall, which has a length of 135 feet, by a breadth of 45 feet, is considered by competent judges to be a masterpiece of architectural art. Classes were first held in the completed portion of the building in 1857. Under the original deed of grant of lands for University purposes provision was made for sub-grants for the erection of colleges in connection with the Church of England, Roman Catholic, Presbyterian, and Wesleyan Methodist Churches. St. Paul's College was incorporated by an Act passed in December, 1854, and the building in an incomplete form was opened in 1858. The Act of Incorporation of St. John's was dated 15th September, 1857, while St. Andrew's was incorporated under Act 31 Vic. The right of the Wesleyan body to a grant lapsed in 1860, and efforts to revive it have not been successful. The Women's College was opened in 1892, women being admitted as students of the University in 1881. Prince Alfred Hospital, incorporated in 1873, and erected at a cost of upwards of £180,000, is also situated in the University grounds.

Under an Act passed in 1881 graduates from other recognised Universities were admitted to the rights and privileges of members of the Sydney University, and the same Act also provided for an extension of the academic franchise to B.A.'s of three years' standing. Similar privileges were conferred on Bachelors in the other faculties by the Act of 1884.

As previously stated, there were only three professorships at the inception of the University. Up to 1880 the endowment stood at £5000 per annum, and, practically, the whole of this sum was absorbed in providing for the Chairs of Classics, Mathematics, Chemistry and Physics, and Geology and Mineralogy. The endowment was increased by £1000 in 1880, and it is from this year that the real expansion of the University began, its growth being largely assisted by the munificent Challis bequest, which originally amounted to about £190,000, and is now valued at £268,224. The Chair of Law was established in 1890, although prior to that time lectures in various branches of law were delivered by several lecturers.

The present fine Medical School started from very humble beginnings. Pending its erection a Chair of Anatomy and Physiology was established in 1883, and lecturers were appointed in various medical subjects, the teachers and students being accommodated in the main building until the Medical School, which cost £80,000, was completed.

A separate Faculty of Science was established in 1882, and the Chair of Natural History was divided into the three professorships of geology, physical geography, and biology. The teaching of engineering commenced in 1882 with a lectureship, but in 1884 the position was elevated to a professorship.

The School of Mines was established in 1892.

The progress of the engineering section of the University was greatly assisted by a donation in 1896 of £50,000 from Sir (then Mr.) Peter Nicol Russell, which he most generously supplemented by a second donation of £50,000, making £100,000 in all, in 1904.

Pharmacy students were admitted to the prescribed University courses in 1899, and a Dental School was opened in 1901.

At the present time there are altogether ninety-four teachers engaged in the Sydney University, of whom fifteen are professors, seventy-four lecturers and demonstrators, and five honorary teachers.

**2. University of Melbourne.**—The University of Melbourne was established by an Act of the Parliament of Victoria, which received the Royal assent on the 22nd January, 1853, and its first Council was appointed by proclamation dated the 11th April of that

year. The foundation stone of the main building was laid on the 3rd July, 1854, and the University was formally opened on the 13th April, 1855. Letters Patent recognising its degrees as entitled to rank with those of any University in the United Kingdom were granted in 1859.

The original Act was subjected to various amendments, and, by a measure passed on the 10th July, 1890, the law relating to the University was consolidated. The principal provisions of this measure were as follows:—By section 4 the University is declared to consist of a Council and of a Senate, and is proclaimed to be a body corporate and politic under the name of "The University of Melbourne," by which title it is to have perpetual succession and a Common Seal, etc. Section 6 declares that the Council shall be elected by the Senate, and shall consist of twenty male members. Teachers in the University may be represented on the Council, but the number of such members is not to exceed three. This Council is to have the entire management of the University, subject to statutes and regulations to be from time to time adopted by Council and Senate. By section 23 it is expressly provided that no religious test is to be applied in order to entitle persons to be admitted as students to the University. The endowment was fixed at the sum of £9000 per annum. It is provided by section 25 that the Council may grant degrees in any faculty except Divinity, its powers in regard to all diplomas being the same as those of any University in the United Kingdom. The provisions of the Act apply equally to both sexes, but the Council may, if it thinks fit, exclude females from attendance at any lectures, but not from any examination in the University. Further amendments were introduced by the Acts of 1903 and 1904, the latter Act providing for three additional members of the University Council, to be appointed by the Governor-in-Council. Provision was also made for increasing the University endowment during the ten years commencing in July, 1904, by additional annual grants of £11,000, on condition that the University would (a) afford increased facilities for carrying on scientific and laboratory training in mining and agriculture; (b) co-operate with schools of mines and agricultural colleges throughout the State in order to ensure a wider sphere of usefulness for these institutions; and (c) provide for the admission of students for diplomas in mining and agriculture without their having passed the full matriculation examination. Provision was made for a further grant of £1000 in case the University provided evening lectures in mining, agriculture, and education.

At present the University grants degrees in Arts, Law, Science, Medicine, Surgery, Dental Surgery, Civil, Mining, and Mechanical Engineering, Agriculture and Music. Diplomas are granted for shorter courses in Education, Public Health, Architecture, Mining, Metallurgy, and Analytical Chemistry. Including that of Music, there are altogether sixteen professorships in the University, twenty-eight lecturers, six lecturers and demonstrators, thirteen demonstrators, and seventeen assistant demonstrators.

There are three Colleges affiliated to the University, and built in adjoining grounds, which provide residence and tuition for University students. They have been founded by, and are under the administration of different religious denominations, but are open to all students without distinction of creed.

Trinity College, opened in 1872, was the first University College established in Victoria, and was founded under the auspices of the Church of England. Attached to the College is a hostel for women students, which was opened in 1886. The College staff consists of a warden, vice-warden, and nine lecturers.

Ormond College, founded by the Presbyterian body, was opened in March, 1881. The lectures of the Theological Hall of the Presbyterian Church of Victoria are delivered by a special staff. The general staff consists of a master, five resident tutors, and ten lecturers and visiting tutors. The college is named after Mr. Francis Ormond, whose benefactions to it amounted to over £100,000.

Queen's College, founded by the Wesleyan Church, was opened in 1898. Its teaching staff consists of a master and six tutors.

The Australian College of Dentistry was affiliated in 1906, the University obtaining certain rights in regard to the control of the college, and undertaking to recognise the professional teaching given therein in connection with the degree of Dental Surgery.

The University Conservatorium of Music was founded in 1892 to provide practical training in connection with the Chair of Music endowed by Mr. Francis Ormond. It has a staff of 18 teachers, and was attended in 1907 by 94 students.

**3. University of Adelaide.**—This University was established by Act of Parliament in 1874, and by Letters Patent granted in 1881 its degrees were recognised as on the same footing as those granted in any University in the United Kingdom. The foundation of the University was rendered practicable by the munificent gifts of Sir Walter Hughes and Sir Thomas Elder, each of whom contributed £20,000 towards its establishment. The University Act of 1874 also provided for an annual grant equal to five per cent. on the funds possessed by the institution, but stipulated that the total endowment thus given was not to exceed £10,000 in any single year. The Act also provided an endowment of 50,000 acres of land, and a grant of five acres for a site in the city of Adelaide.

When first constituted there were only four professorships in the University—(1) Classics and Comparative Philology and Literature; (2) English Language and Literature, Mental and Moral Philosophy; (3) Mathematics; (4) Natural Science; the endowments for these being provided for by the gifts of Sir Walter Hughes and Sir Thomas Elder.

Lectures commenced in March, 1876, with a total of sixty students, of whom only eight were matriculants. The foundation-stone of the University buildings was, however, not laid until 30th July, 1879, and the formal opening of the institution took place in April, 1882. The total cost up to date was about £38,000. The munificence of Sir Thomas Elder also rendered possible the establishment of a School of Medicine, for as early as 1883 he made a further donation to the University funds of a sum of £10,000. Arrangements for a complete medical curriculum were perfected in 1886. The Angas Professorship of Chemistry, inaugurated in 1885, owes its origin to the munificence of the Hon. J. H. Angas, who provided a sum of £6000 for its endowment. The Chair of Music was established in 1884, and this was also largely assisted by Sir Thomas Elder, who contributed a sum of £300 annually to its upkeep. In 1890 the lectureship in Law, which had existed since 1883, was raised to a professorship. Considerable additions were made to the University library consequent on the gift since 1892 of upwards of £7500 by Mr. Robert Barr Smith. At present it contains about 19,000 volumes.

Sir Thomas Elder, who died in 1897, bequeathed to the University a sum of £65,000, the total donations of this public-spirited citizen amounting to nearly £100,000. According to the terms of his will £20,000 was apportioned to the School of Medicine, £20,000 to the School of Music, and the balance was made available for the general purposes of the University. The Elder Conservatorium of Music was, therefore, established in 1898, the building being finally completed in 1900. Considerable additions were made to the Engineering and Science Schools in 1901 and to the Medical School in 1902.

In 1903 an arrangement was entered into by the University Council with the Council of the South Australian School of Mines and Industries whereby the two institutions, to some extent, combine their resources in the provision of courses of instruction in mining engineering, metallurgy, mechanical engineering, and electrical engineering, and the allied bodies hold examinations and grant diplomas in various branches of Applied Science. The University also practically controls the Training College for public school teachers.

The University grants degrees in Arts, Science, Law, Medicine and Music, and diplomas in various branches of Applied Science and in Music.

It is believed that the Adelaide University was the first Australian University to grant degrees to women, the power to do so being conferred by an Act of Parliament passed in 1880.

4. **University of Tasmania.**—The University of Tasmania was established by Act of Parliament assented to on the 5th December, 1889, the preamble stating that it was intended to supply to all classes without distinction encouragement for pursuing a regular and liberal course of education. A Council and Senate were provided for, to form, when duly constituted, a body politic and corporate, with perpetual succession and a Common Seal, and having the usual powers and privileges attached to such bodies. The Senate was to consist of male graduates of the University with the degree of Master or Doctor, and of all other male graduates of three years' standing, together with certain other persons, but until the number of Senators reached fifty the Council was to administer the affairs of the University. Provision was made for the granting of degrees in Arts, Science, Law, Medicine, Music and any other specified subjects excepting Theology and Divinity, and also for the conferring of "*ad eundem*" degrees. The Council was empowered to make statutes for the affiliation or connection with the University of technical colleges and schools. It was expressly stated that no religious test was to be applied to persons desirous of joining the University. Appropriations from the Consolidated Fund of sums of £3000 in each of the years 1890 and 1891 were authorised for the endowment of the University. For 1892 and subsequent years the appropriation was fixed at £4000.

By an Amending Act passed in 1890 the number of Councillors was fixed at eighteen of whom nine were to be elected by the Senate, and eight by members of both Houses of Parliament, while the remaining member was to be the Minister of Education. The University is housed in a building which was formerly a proprietary high school, and was acquired for University purposes by Act of Parliament dated 21st December, 1892.

By statute dated April 13th, 1905, the Zeehan School of Mines and Metallurgy became affiliated to the University. At the present time there are professorships in classics and English literature, mathematics and physics, and law and modern history, and lectureships in modern languages, chemistry and geology, mechanical engineering, applied mechanics, mechanical drawing and physics, classics, modern history, mental and moral science, and surveying, and an assistant-lectureship in geology.

5. **Teachers and Students at Universities.**—The following table shews the number of professors and lecturers and the students in attendance at each of the Commonwealth Universities during the year 1907 :—

University.	Professors.	Lecturers.	Students attending Lectures.		
			Matriculated.	Non-matriculated.	Total.
Sydney ... ..	15	74	871	307	1178*
Melbourne ... ..	15	64	636	258	894†
Adelaide ... ..	10	26	378	266	644‡
Tasmania (Hobart) ...	3	5	...	...	101

\* Including 136 females. † Including females, but excluding 36 attending postgraduate courses and 94 music students. ‡ Exclusive of 10 matriculated and 336 non-matriculated music students.

6. **University Revenues.**—The income of the Universities from all sources during the year 1907 was as follows :—

University.	Government Grants.	Fees.	Other.	Total.
	£	£	£	£
Sydney ... ..	13,750	17,220	16,713	47,683
Melbourne ... ..	21,000	*18,839	3,914	43,753
Adelaide ... ..	6,990	9,075	7,352	23,417
Tasmania (Hobart) ...	4,000	869	151	5,020

\* Exclusive of Conservatorium of Music, £2282; Music Examination Board, £1055; Bacteriological Laboratory, £1087.

The column "Other" includes the receipts from private foundations. In the case of the Sydney University these were considerable, the Challis bequest alone representing property to the value of £268,224.

**7. University Extension.**—Under a statute of the Senate of Sydney University, approved of in 1892, a Board was appointed, which was empowered from time to time to recommend to the Senate the names of suitable persons for giving courses of lectures, and to hold examinations in the subjects of the lectures. The Board receives and considers applications from country centres, and makes provision for engaging lecturers and managing the entire business connected with the various courses. The project has only met with fair success, no lectures having been given in some years, but lately there appears to be an awakening of interest in the matter. The Board also arranges for courses of lectures in Queensland. In 1907 there were eleven courses of lectures given in New South Wales, and attended by 819 students.

University extension lectures in Victoria date from the year 1891, when a Board was appointed by the Melbourne University for the purpose of appointing lecturers and holding classes and examinations at such places and on such subjects as it might think fit. Interest in University extension is apparently on the wane in Victoria, as lectures were delivered in five centres only in 1905 and 1906, as against eight centres in 1904.

The Adelaide University has also instituted short courses of extension lectures in Arts and Science, to which students are admitted on payment of a nominal fee. Public intimation of these lectures is made from time to time during the session. For 1907 a course of eleven lectures was provided—two in Chemistry, three in Science, three in Literature, and three in Law. The Hobart University provides for courses of lecture at Launceston, the lectures being delivered weekly by members of the University teaching staff.

## § 5. Technical Education.

**1. General.**—Although provision has been made in some of the States in respect to many necessary branches of technical education, the total provision made would imply that this branch of education has not been regarded as of great importance. As will be seen later on, the expenditure on technical education for the whole of Australasia is comparatively insignificant.

**2. New South Wales.**—The present organisation of technical education in this State dates from the year 1883, when a Technical Education Board was appointed as a result of suggestions made at the Technological Conference held in 1879. This Board continued its functions till November, 1889, when it was dissolved, and the work has thenceforward been carried on as a branch of the Public Instruction Department. The chief centre of activity is, of course, in Sydney, where the Technical College and Technological Museum are situated, the college having been opened for the reception of students early in 1892. Colleges have also been erected in some of the chief country towns, and classes in various subjects are held at a large number of public schools. As mentioned elsewhere, higher technical training is afforded at the Schools of Mines and Engineering in connection with the University. References to the agricultural colleges will be found in the section dealing with Agriculture.

**3. Victoria.**—Technical instruction in mining has for many years received considerable attention in Victoria, the Ballarat School of Mines, which was established as far back as 1870, having achieved an Australasian reputation. The general scheme of instruction, however, lacked cohesion, and it was not until after the publication of the Report of the Royal Commission on Technical Education, which was appointed in 1899, that many defects were remedied. Science and Art classes have also been established at some of the larger State schools.

**4. Queensland.**—Previous to 1902 technical colleges were carried on in connection with Schools of Art in many of the towns, under the control of local committees, by whom regulations were framed and the colleges administered. The aid granted by the